

DWC-01 Water Impoundment Reservoir

Purpose

Stabilize the grade and control gully erosion in natural or artificial channels.

Applicability

Applies to agricultural land where the concentration and flow velocity of water requires a water impoundment reservoir to stabilize the grade in channels or to control gully erosion not contained in dense forest cover. For the purposes of this practice, CRP land surrounding the water impoundment reservoir site is considered agricultural land.

Erosion Requirements

Practice is eligible for cost-share based on gully erosion. Post-installation erosion rates must be less than pre-installation erosion rates.

Gully Erosion Checks: PRE-INSTALL > POST-INSTALL

Specifications

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Vegetation Establishment, Herbaceous Seeding (723), Pond (378), Fence (382), Grade Stabilization Structure (410), livestock exclusion under Access Control (472), Livestock Pipeline (516), and Watering Facility (614) contained in the Field Office Technical Guide.

Policies

1. Cost-share is authorized for:

- a. Structures that provide erosion control benefits.
- b. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
- c. Installation of livestock watering facilities.
 - 1) Cost-share is limited to one livestock watering tank or hydrant or limited access watering point. A supply pipe may also be installed in addition to a limited access watering point. Cost-share is limited to 300 feet of pipe from the dam to the livestock watering facility.
 - 2) To qualify for cost-share, a livestock watering facility must be installed during construction. Livestock watering facilities installed any time during the maintenance life of the practice is the landowner's responsibility.
- d. Exclusion fence to protect from livestock.
 - 1) Required if cost-share is authorized to install a livestock watering tank or hydrant.
 - 2) To qualify for cost-share, fence must be installed during construction. Fence installed any time during the maintenance life of the practice is the landowner's responsibility.
- e. Reconstruction, under the conditions listed in Section V, subsection F.
- f. Replacement of failed spillway pipe, under the conditions listed in Section V, subsection H.

g. Gully Repair in Emergency Spillway

- 1) If gully erosion is present at the emergency spillway and needs repaired, in order to be eligible, the original structure must have been built according to NRCS standards and specifications. Cost-share is only eligible on structures not under a current maintenance agreement. The maintenance life of the practice starts when the payment is issued for repair of the spillway.
- 2) The practice must be a new and separate contract with all other required supporting documentation. The district must ensure the Special Practice Description of “Reconstruction” is chosen from the dropdown and state the contract number of the original practice in the Original Contract(s) field. A note shall be placed in MoSWIMS to justify the reconstruction.

3. *Cost-share is not authorized for:*

- a. Structures with an overall dam height of 25 feet or more in height, with a storage volume of at least 50 acre-feet of water. For purposes of this definition, the height of the dam is measured either from the natural bed of the stream or watercourse at the downstream toe of the barrier or dam or the lowest point on the downstream toe of the dam, whichever is lower, up to the lowest dam crest elevation. The storage volume is the amount of water stored in the reservoir below the dam crest elevation.
- b. Any reservoir for erosion control in forested areas, except for woody draws impacted by crop and pasture fields. Forested areas are defined in this policy, as shown on the latest available aerial map, as tree canopy completely covering the proposed pond site. Heavy clearing is not an approved component for this practice.
- c. Construction of a reservoir when agricultural activity does not surround the structure site.
- d. Any reservoir designed for aesthetic or recreational purposes.
- e. Any structure site cleared by the cooperator prior to eligibility approval.
- f. Any reservoir designed primarily for flood control or storm water retention.
- g. Pipelines or troughs to furnish water to farm buildings.

Maximum State Cost-Share

1. Assistance is limited to 75% of the county average cost, not to exceed the state average cost.
2. The maximum assistance that can be paid for this practice is \$10,000.

Map Requirements

1. Shapefiles from NRCS’s Toolkit program must be saved on the district’s T:\ drive to be utilized for the eligibility approval. The shapefiles must contain attributes showing the following information that pertains to the contract:
 - Farm perimeter
 - Dam
 - Drainage Acres
 - Pool Area

2. Shapefiles from NRCS's Toolkit program must be saved on the district's T:\ drive prior to contract approval. The shapefiles must contain attributes that show the following information that pertains to the contract:
 - Farm perimeter
 - Dam
 - Drainage Acres
 - Pool Area
 - Pipeline, including principle spillway pipe and waterline
 - Water Source
 - Watering Facility (Specify Tank or Hydrant)
 - Planned Fence
 - Any other features that may affect the contract.
3. A map that displays the completed practice must be scanned and attached as a document type "Map" in MoSWIMS prior to contract payment submission.

Technical Responsibilities

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

Acres Served

Acreage that drains into the structure.

Extent Installed

Cubic Yards.

Maintenance Life

10 years.